ABSTRACT

An object of the present invention is to provide a thermostable DNA polymerase with enhanced amplification efficiency and/or improved fidelity in polymerase chain 5 reaction (PCR), and provide a process for production thereof. More specifically, the present invention provides thermostable DNA polymerase wherein in the DX₁EX₂X₃X₄H sequence (D: aspartic acid, E: glutamic acid, H: histidine, X_1 , X_2 , X_3 and X_4 : any amino acid) consisting 10 of DX₁E sequence within the EXO I region and a four amino acid length peptide adjacent to said glutamic acid(E) of thermostable DNA polymerase having 3'-5' exonuclease activity, histidine(H) has been replaced by another amino acid.

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